

Fourth Semester B. Sc. Examination

BIOCHEMISTRY

Paper - II

(Biophysical and Biochemical Techniques)

Time : Three Hours]

[Max. Marks : 50

- N. B. : (1) All questions are compulsory.
(2) All questions carry equal marks.
(3) Draw diagram wherever necessary.

1. What is electrophoresis ? Describe in detail factors affecting electrophoretic mobility.

OR

Describe the technique of Gel electrophoresis with its applications. 10

2. Discuss in detail SDS-PAGE electrophoresis. 10

OR

Write note on :—

(a) Immunoelectrophoresis.

(b) ELISA. 10

3. Write the principle and working of G. M. counter with its advantages and disadvantages.

OR

Describe the principle of tracer techniques. Add a note on its advantages and limitations. 10

4. Write short note on :—

(a) High speed centrifugation. 5

(b) Ultracentrifugation. 5

OR

(c) ISO-pycnic centrifugation. 5

(d) Rate zonal centrifugation. 5

5. Answer any ten questions of the following :—

(I) What is RCF ?

(II) What is rpm ?

(III) What is Isoelectric focussing ?

(IV) Name any two gels used in gel-electrophoresis.

(V) What is meant by isotope dilution ?

(VI) What do you mean by autoradiograph ?

(VII) Define Svedberg unit.

(VIII) Define a curie.

(IX) What is meant by ampholyte ?

(X) Name any two solubaliser used in electrophoresis.

(XI) What is meant by Immunodiffusion ?

(XII) Give any one applications of High Voltage Electrophoresis. 1x10=10